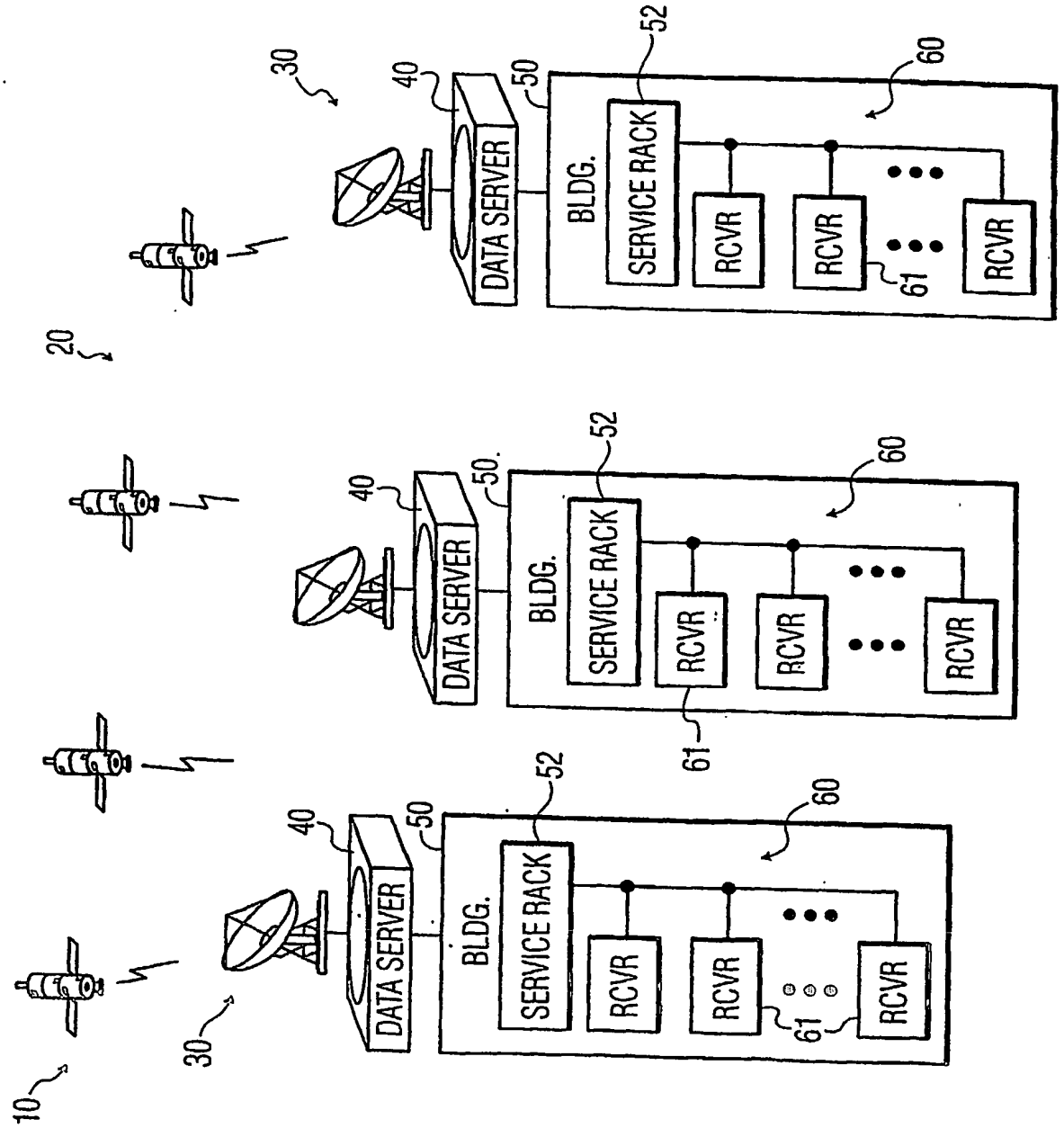

FIG. 1

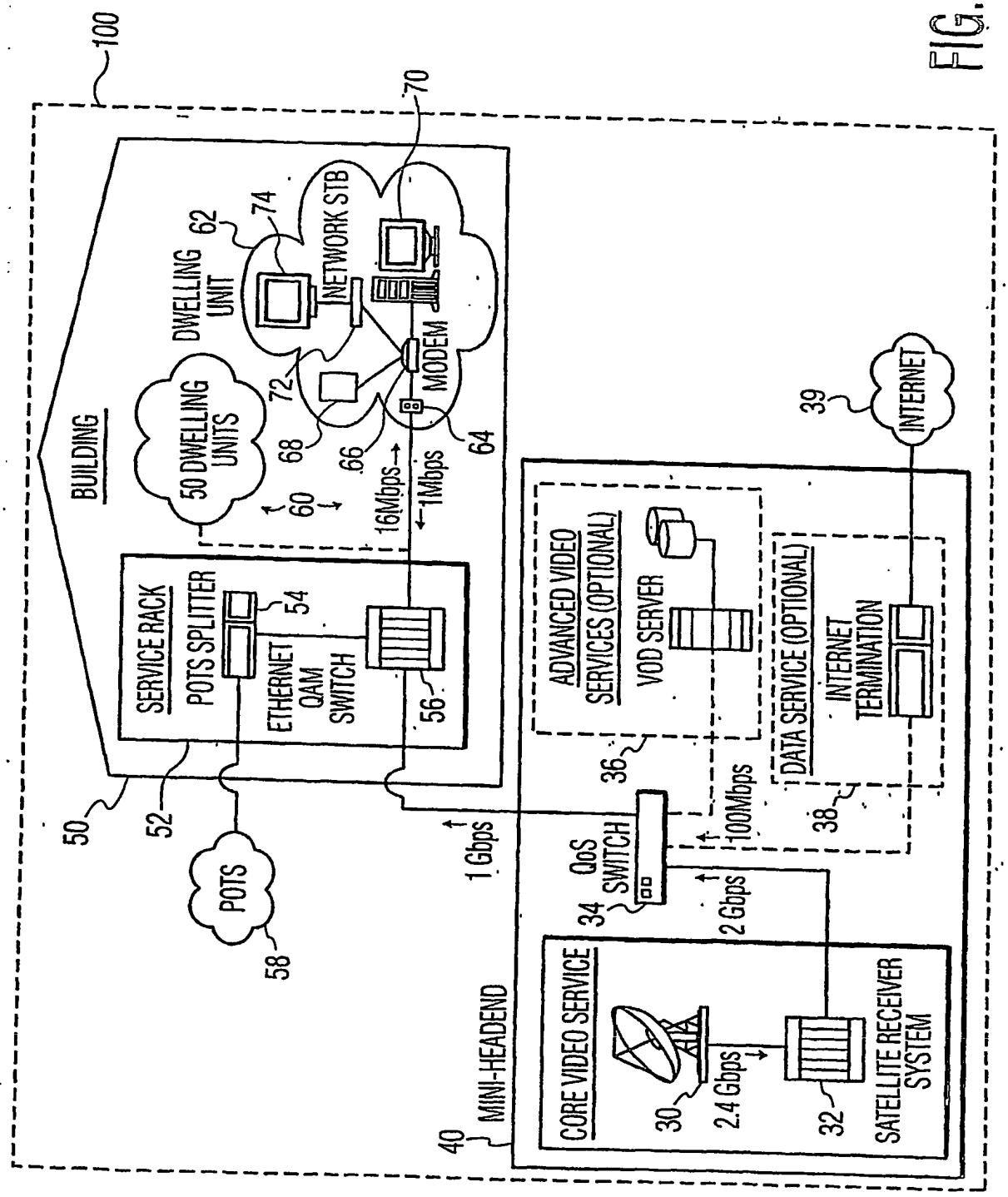
100
BUILDING
50 DWELLING UNITS
60
DWELLING UNIT
62
74
NETWORK STB
70
72
68
66
MODEM
64
16Mbps
1Mbps
SERVICE RACK
POTS SPLITTER
54
ETHERNET QAM SWITCH
56
50
52
POTS
58
1 Gbps
MINI-HEADEND
40
ADVANCED VIDEO SERVICES (OPTIONAL)
VOD SERVER
36
DATA SERVICE (OPTIONAL)
INTERNET TERMINATION
38
100Mbps
QoS SWITCH
34
2 Gbps
39
INTERNET
CORE VIDEO SERVICE
30
2.4 Gbps
32
SATELLITE RECEIVER SYSTEM

FIG. 2

80

PARAMETER	RANGE DECIMAL	RANGE HEXADECIMAL
SATELLITE	0..7	0x00..0x07
TRANSPONDER	0..31	0x00..0x1F
PID OR SCID	0..8191	0x00..0x1FFFF

FIG. 3

90

IPV4 BITS	ALLOCATION
0..12	PID OR SCID
13..15	SATELLITE NUMBER
16..17	RESERVED FOR WELL KNOWN MULTICAST ADDRESSES
18..22	TRANSPONDER (0 TO 31)
23..31	RESERVED FOR WELL KNOWN MULTICAST ADDRESSES & MULTICAST

FIG. 4

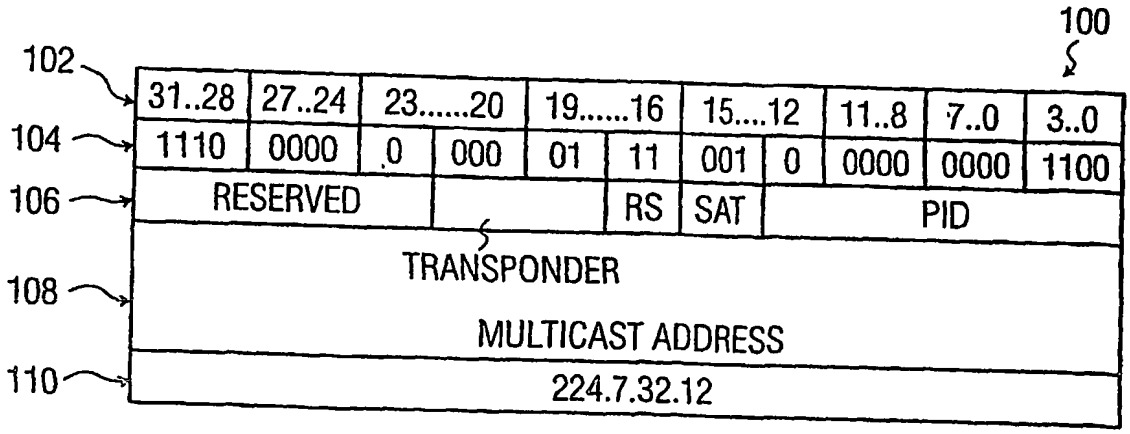

FIG. 5

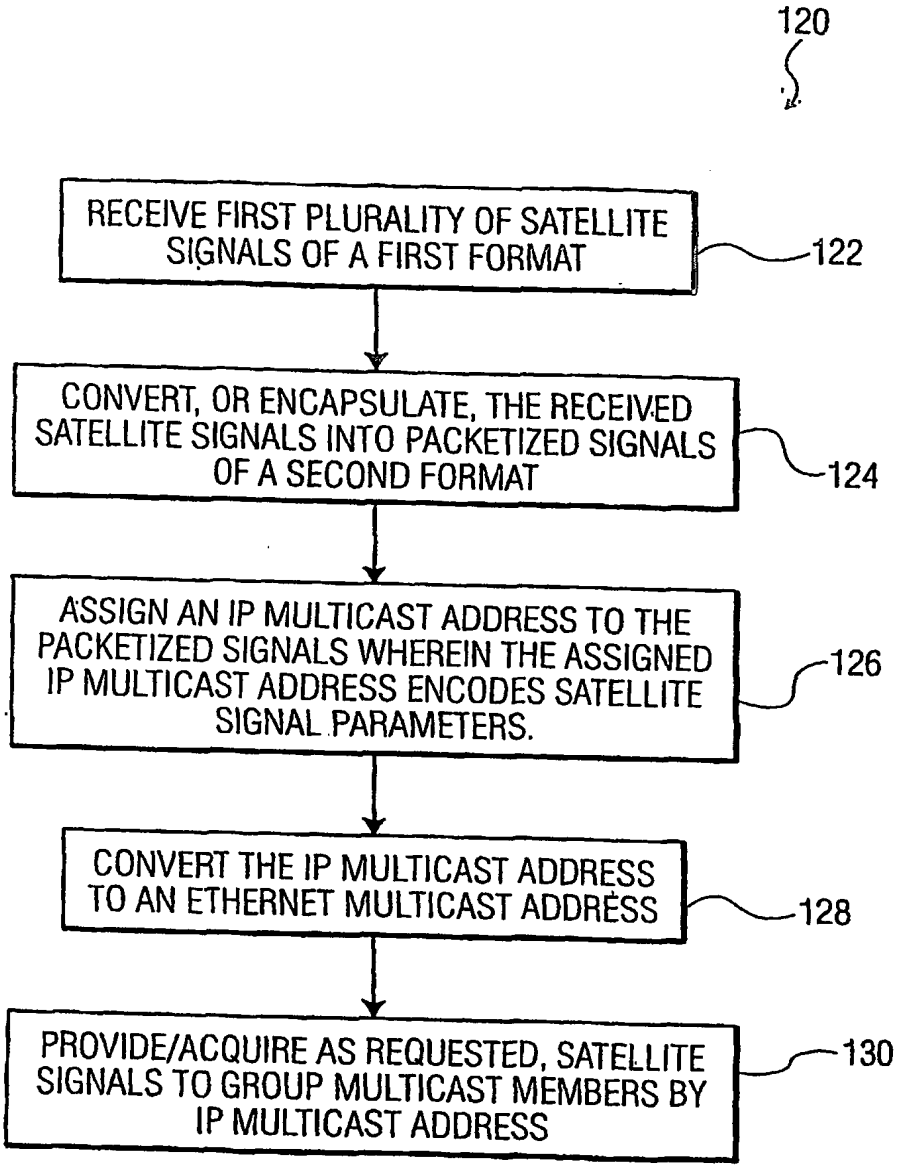
120
RECEIVE FIRST PLURALITY OF SATELLITE SIGNALS OF A FIRST FORMAT
122
CONVERT, OR ENCAPSULATE, THE RECEIVED SATELLITE SIGNALS INTO PACKETIZED SIGNALS OF A SECOND FORMAT
124
ASSIGN AN IP MULTICAST ADDRESS TO THE PACKETIZED SIGNALS WHEREIN THE ASSIGNED IP MULTICAST ADDRESS ENCODES SATELLITE SIGNAL PARAMETERS.
126
CONVERT THE IP MULTICAST ADDRESS TO AN ETHERNET MULTICAST ADDRESS
128
PROVIDE/ACQUIRE AS REQUESTED, SATELLITE SIGNALS TO GROUP MULTICAST MEMBERS BY IP MULTICAST ADDRESS
130

FIG. 6